



<110> FUJI PHOTO FILM B.V.

<120> Oil-in-water emulsions stabilised with recombinant collagen-like material

<130> OLIJVE

<140> US09/602,45

<141> 2000-06-23

<150> EP 99202047.9

<151> 1999-06-24

<160> 25

<210> 1

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-PA-FW

<400> 1

gcgctcgaga aaagagaggc tgaagc

26

<210> 2

<211> 108

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-PA-FW

<400> 2

gcgctcgaga aaagagaggc tgaagctggc ccacccggtg agccaggtaa cccaggatct 60
cctggtaacc aaggacagcc cggtacaacaag gtttctccag gtaatcca 108

<210> 3

<211> 110

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-PA-RV

<400> 3
tgagaacctt gtggaccgtt ggaacctggc tcaccaggtt gtccgttctg accaggttga 60
ccagggttgcac ctgcgttcc tggttgaccc ggattacctg gagaaccctt 110

<210> 4

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-PA-RV

<400> 4
tgagaacctt gtggaccgtt ggaa 24

<210> 5

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-PB-FW

<400> 5
ttccaacggt ccacaagggtt ctca 24

<210> 6

<211> 115

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-PB-FW

<400> 6
ttccaacggt ccacaagggtt ctcaggtaa ccctggaaag aatggtcaac ctggatcccc 60
agttcacaa ggctctccag gtaaccaagg ttcccctggt cagccaggtt accct 115

<210> 7

<211> 108

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-PB-RV

<400> 7

gcgtctgcag tacgaattct attagccacc ggctggaccc tggtttcctg gtttaccttg 60
ttcacctggc tgaccagggt tacctggctg accagggaa ccttggtt 108

<210> 8

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-PB-RV

<400> 8

gcgtctgcag tacgaattct attagc 26

<210> 9

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> HLP-PA-FW

<400> 9

gcgctcgaga aaagagaggc tgaagc 26

<210> 10

<211> 111

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-NA-FW

<400> 10

gcgctcgaga aaagagaggc tgaagctggc ccacccggtg ttccagggtt cattggattc 60
cctggttgc caggatggcc aggtgtcttc ggtattcctg gttacccagg t 111

<210> 11

<211> 114

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N1A-RV

<400> 11
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acctggccaa ccaggccagc caaggtaacc tggtaacca ggaataccga agac 114

<210> 12

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-N1A-RV

<400> 12
tggccaacct ggaaaaccag gccat 25

<210> 13.

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-N1B-FW

<400> 13
atggcctgg tttccaggtt ggc 25

<210> 14

<211> 107

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N1B-FW

<400> 14
atggcctggt tttccaggtt ggcaggatt cattggtctg cctggttact tgggaccatg 60
gggtttgtt gttggcctg gttggttggg ttacccaggt ttgttcg 107

<210> 15

<211> 108

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N1B-RV

<400> 15
gcgtctgcag tacgaattct attagccacc ggctggaccg tggtcaccgg ggattccctc 60
gtgaccaggg taacctggta atccgaacaa acctggtaa cccAACCA 108

<210> 16

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-PB-RV

<400> 16
gcgtctgcag tacgaattct attagc 26

<210> 17

<211> 106

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N2A-RV

<400> 17
catagataacc agggtaacca aatggtccc accaaccgaa aggtcctggc caacctggcc 60
aaccaggcca gccaaaggtaa cctggtaac caggaatacc gaagac 106

<210> 18

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-N2A-RV

<400> 18
catagataacc agggtaacca aatggtccca 30

<210> 19

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> HLP-N2B-FW

<400> 19
tgggaccatt tggttaccct ggtatctatg 30

<210> 20

<211> 116

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N2B-FW

<400> 20
tgggaccatt tggttaccct ggtatctatg gttggccagg tttcctgggt taccctggta 60
tcttcggacc atggggtcca tacggtttcc ctggtatgcc aggtatgcct ggtatg 116

<210> 21

<211> 117

<212> DNA

<213> Artificial Sequence

<220>

<223> OVL-N2B-RV

<400> 21
gcgtctgcag tacgaattct attagccacc ggctggacca tcgtgaccgt gatgtccgtg 60

gtgaccgggc ttacccttgt ctcctggcat accaggcata cctggcatac cagggaa 117
<210> 22
<211> 599
<212> PRT
<213> Artificial Sequence
<220>
<223> Protein consisting of two identical nonpolar and four polar modules; N1N1P4
<400> 22
Gly Pro Pro Gly Val Pro Gly Phe Ile Gly Phe Pro Gly Leu Pro Gly
1 5 10 15
Trp Pro Gly Val Phe Gly Ile Pro Gly Tyr Pro Gly Tyr Leu Gly Trp
20 25 30
Pro Gly Trp Pro Gly Phe Pro Gly Ile Phe Gly Tyr Pro Gly Tyr Pro
35 40 45
Gly Trp Pro Gly Phe Pro Gly Trp Pro Gly Phe Ile Gly Leu Pro Gly
50 55 60
Tyr Leu Gly Pro Trp Gly Phe Val Gly Trp Pro Gly Trp Leu Gly Tyr
65 70 75 80
Pro Gly Leu Phe Gly Leu Pro Gly Tyr Pro Gly His Glu Gly Ile Pro
85 90 95
Gly Asp His Gly Pro Ala Gly Val Pro Gly Phe Ile Gly Phe Pro Gly
100 105 110
Leu Pro Gly Trp Pro Gly Val Phe Gly Ile Pro Gly Tyr Pro Gly Tyr
115 120 125
Leu Gly Trp Pro Gly Trp Pro Gly Phe Pro Gly Ile Phe Gly Tyr Pro
130 135 140
Gly Tyr Pro Gly Trp Pro Gly Phe Pro Gly Trp Pro Gly Phe Ile Gly
145 150 155 160
Leu Pro Gly Tyr Leu Gly Pro Trp Gly Phe Val Gly Trp Pro Gly Trp
165 170 175
Leu Gly Tyr Pro Gly Leu Phe Gly Leu Pro Gly Tyr Pro Gly His Glu
180 185 190
Gly Ile Pro Gly Asp His Gly Pro Ala Gly Glu Pro Gly Asn Pro Gly
195 200 205
Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn Lys Gly Ser Pro Gly Asn
210 215 220

Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro Gly Gln Pro Gly Gln Asn
225 230 235 240

Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly Pro Gln Gly Ser Gln Gly
245 250 255

Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser Pro Gly Ser Gln Gly Ser
260 265 270

Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro Gly Asn Pro Gly Gln Pro
275 280 285

Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly Pro Ala Gly Glu Pro Gly
290 295 300

Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn Lys Gly Ser
305 310 315 320

Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro Gly Gln Pro
325 330 335

Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly Pro Gln Gly
340 345 350

Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser Pro Gly Ser
355 360 365

Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro Gly Asn Pro
370 375 380

Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly Pro Ala Gly
385 390 395 400

Glu Pro Gly Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn
405 410 415

Lys Gly Ser Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro
420 425 430

Gly Gln Pro Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly
435 440 445

Pro Gln Gly Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser
450 455 460

Pro Gly Ser Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro
465 470 475 480

Gly Asn Pro Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly
485 490 495

Pro Ala Gly Glu Pro Gly Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln
500 505 510

Pro Gly Asn Lys Gly Ser Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu
515 520 525

Gly Gln Pro Gly Gln Pro Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly
530 535 540

Ser Asn Gly Pro Gln Gly Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln
545 550 555 560

Pro Gly Ser Pro Gly Ser Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro
565 570 575

Gly Gln Pro Gly Asn Pro Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly
580 585 590

Asn Gln Gly Pro Ala Gly Gly
595

<210> 23

<211> 599

<212> PRT

<213> Artificial Sequence

<220>

<223> Protein consisting of two different nonpolar and four polar modules;
N1N2P4

<400> 23

Gly Pro Pro Gly Val Pro Gly Phe Ile Gly Phe Pro Gly Leu Pro Gly
1 5 10 15

Trp Pro Gly Val Phe Gly Ile Pro Gly Tyr Pro Gly Tyr Leu Gly Trp
20 25 30

Pro Gly Trp Pro Gly Phe Pro Gly Ile Phe Gly Tyr Pro Gly Tyr Pro
35 40 45

Gly Trp Pro Gly Phe Pro Gly Trp Pro Gly Phe Ile Gly Leu Pro Gly
50 55 60

Tyr Leu Gly Pro Trp Gly Phe Val Gly Trp Pro Gly Trp Leu Gly Tyr
65 70 75 80

Pro Gly Leu Phe Gly Leu Pro Gly Tyr Pro Gly His Glu Gly Ile Pro
85 90 95

Gly Asp His Gly Pro Ala Gly Val Pro Gly Phe Ile Gly Phe Pro Gly
100 105 110

Leu Pro Gly Trp Pro Gly Val Phe Gly Ile Pro Gly Tyr Pro Gly Tyr
115 120 125

Leu Gly Trp Pro Gly Trp Pro Gly Trp Pro Gly Pro Phe Gly Trp Leu
130 135 140

Gly Pro Phe Gly Tyr Pro Gly Ile Tyr Gly Trp Pro Gly Phe Leu Gly
145 150 155 160

Tyr Pro Gly Ile Phe Gly Pro Trp Gly Pro Tyr Gly Phe Pro Gly Met
165 170 175

Pro Gly Met Pro Gly Met Pro Gly Asp Lys Gly Lys Pro Gly His His
180 185 190

Gly His His Gly His Asp Gly Pro Ala Gly Glu Pro Gly Asn Pro Gly
195 200 205

Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn Lys Gly Ser Pro Gly Asn
210 215 220

Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro Gly Gln Pro Gly Gln Asn
225 230 235 240

Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly Pro Gln Gly Ser Gln Gly
245 250 255

Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser Pro Gly Ser Gln Gly Ser
260 265 270

Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro Gly Asn Pro Gly Gln Pro
275 280 285

Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly Pro Ala Gly Glu Pro Gly
290 295 300

Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn Lys Gly Ser
305 310 315 320

Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro Gly Gln Pro
325 330 335

Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly Pro Gln Gly
340 345 350

Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser Pro Gly Ser
355 360 365

Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro Gly Asn Pro
370 375 380

Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly Pro Ala Gly
385 390 395 400

Glu Pro Gly Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln Pro Gly Asn
405 410 415

Lys Gly Ser Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu Gly Gln Pro
420 425 430

Gly Gln Pro Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly Ser Asn Gly
435 440 445

Pro Gln Gly Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln Pro Gly Ser
450 455 460

Pro Gly Ser Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro Gly Gln Pro
465 470 475 480

Gly Asn Pro Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly Asn Gln Gly
485 490 495

Pro Ala Gly Glu Pro Gly Asn Pro Gly Ser Pro Gly Asn Gln Gly Gln
500 505 510

Pro Gly Asn Lys Gly Ser Pro Gly Asn Pro Gly Gln Pro Gly Asn Glu
515 520 525

Gly Gln Pro Gly Gln Pro Gly Gln Asn Gly Gln Pro Gly Glu Pro Gly
530 535 540

Ser Asn Gly Pro Gln Gly Ser Gln Gly Asn Pro Gly Lys Asn Gly Gln
545 550 555 560

Pro Gly Ser Pro Gly Ser Gln Gly Ser Pro Gly Asn Gln Gly Ser Pro
565 570 575

Gly Gln Pro Gly Asn Pro Gly Gln Pro Gly Glu Gln Gly Lys Pro Gly
580 585 590

Asn Gln Gly Pro Ala Gly Gly
595

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PRIMER for PCR

<400> 24

gactggttcc aattgacaag c 21

<210> 25

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PRIMER for PCR

<400> 25

gcaaatggca ttctgacatc c

21